

TECHNICAL SPECIFICATION

Full description of the subject of the service

Technical specifications for holding a tender for:

Archaeological Studies of Archaeological Sites Found Along The Route Of Gas Interconnector Greece-Bulgaria

Contents

1. Project description.....	3
2. Description of the subject of the service.....	4
3. Requirements to conducting archeological studies	15
4. Report and work program for organization and implementation	18
5. Drafting and submission of field documentation	19
6. Communication with local authorities	19
7. Simultaneous implementation of archeological studies	19
8. Internal control on implementation	19
9. Sites data	19
10. Unforeseen field peculiarities	20
11. Temporary facilities.....	20
12. Other obligations of the Contractor	20
13. Implementation terms. Priority studies	20
14. Special technical equipment. Use of special technical equipment	21
16. Safety measures.....	21
17. Security and signs	22
18. Environmental protection	22
19. Archeological valuables protection.....	22
20. Maintenance of the archeological site	22
21. Security on the archeological site	22
22. Main operations on the Archeological site.....	22
23. Supplies to the Archeological site	22
24. Recovery of the appearance	22
25. 3D localization	22
26. Premises and equipment.....	23
27. Correspondence.....	23

1. Project description.

The project for gas interconnector Greece-Bulgaria (IGB) is a project for a new gas transmission pipeline between the Republic of Greece and the Republic of Bulgaria. The role of the project is to improve the security of supplies for the Republic of Bulgaria and the region and to connect the gas transmission networks of both countries.

The total length of the gas pipeline route is about 182 km. Its length on the territory of Bulgaria is about 151 km and operational pressure 7,5 MPa and diameter DN800. The point where the gas pipeline crosses the border between Greece and Bulgaria is about 1,2 km to the north-east of Makaza border check point. The connection of the gas interconnector with the gas ring of Bulgaria will be done to the south of the village of Malko Kadievo, Stara Zagora municipality. The gas pipeline will be laid underground and the minimum depth of laying of the gas pipeline and the casings measured up to the upper generant of the pipe is 0.8 m. Crossing of each obstacle shall be done as per an individual design.

The route of the gas pipeline passes through three districts and nine municipalities:

- the district of Kardzhali and the municipalities of Kirkovo, Dzhebel, Momchilgrad, Kardzhali;

- the district of Haskovo and the municipalities of Haskovo and Dimtrovgrad;

- the district of Stara Zagora and the municipalities of Opan, Stara Zagora and Radnevo;

The gas pipeline route provides for technological sites for:

- Line block valve (BV2) at km25.2 (Velikdenche village),
- AGRS Kardzhali and block valve (BV 3) at km50.0,
- Line block valve (BV 3a) at km79.2 (Mandra village),
- Line block valve (BV 4) at km96.8,
- Dispatching centre with an Operation and maintenance base on the lands belonging to the town of Haskovo and the village of Stamboliyski;
- Line block valve (BV 4a) at km111.3 (Chernogorovo village),
- AGRS Dimitrovgrad - at km117.2,
- Line block valve (BV 5) (Golyamo Asenovo village), located on transmission gas pipeline after AGRS Dimitrovgrad connecting IGB project with a gas transmission pipeline DN500 of Bulgartransgaz EAD,
- Line block valve (BV 6) (Trakia village) at km129.5,
- GMS-2 (Stara Zagora) at km150.5. connecting IGB project with a gas transmission gas pipeline DN700 of Bulgartransgaz EAD
- Line block valve (BV 7) (Zagore village) at km150.9, located at transmission gas pipeline DN 700 diameter after GMS-2 Stara Zagora
- 3 cathodic protection stations (CPS) with 3 power supply lines for CPS.

In connection with the investment intention of ICGB AD to construct Gas interconnector Greece-Bulgaria in 2012 an Environmental impact assessment report (EIAR) was prepared. Based on Decision №1-1/2013, the Ministry of Environment and Water (MOEW) gave a positive assessment of EIAR which is now effective. The gas pipeline route crosses the following protected areas:

- Protected areas pursuant to the Habitats directive 92/43/EEC:

“The Rhodopes - East” BG0001032, “Ostar kamak” BG0001034, “the Maritsa river” BG0000578, “the Martinka River” BG0000442, “the Sazliika River” BG0000425.

- protected areas pursuant to Directive 79/409/EEC on conservation of wild birds:

Studen Kladenets BG0002013.

Pursuant to art. 161 of the Cultural Heritage Act before implementing an investment project in territories for which there are data for existence of archeological sites, preliminary archeological studies are mandatorily done which establish whether they will not be affected or damaged. On archeological sites found during these studies and for which it has been established that they will be affected, rescue excavations are done before start of construction works. The process is monitored by archaeologists.

At the stage of environmental impact assessment for the investment proposal preliminary archeological studies have been performed pursuant to the procedure in art. 160 of the Cultural Heritage Act (CHA). In the studies performed 83 archeological sites have been identified on the confirmed west route of the gas pipeline. In its decision № 1-1/2013 on approving the environmental impact assessment MOEW confirms that for 16 archeological sites full rescue archeological excavations need to be performed before start of construction, for 13- archeological drills and for 28 sites strict archeological supervision to be performed during construction. In its opinion outgoing № 26-00-0429/19.04.2013 the Ministry of Culture approved Decision №1-1/2013 on EIA and confirmed the measures recommended.

2. Description of the subject of the service.

The project investor on the territory of the Republic of Bulgaria needs to select a contractor for the following activities: **Archaeological Studies (rescue archeological excavations, archeological drills and archeological supervision) of archeological sites found along the route of Gas Interconnector Greece-Bulgaria.** Subject of archeological studies is the linear part of IGB gas pipeline from km 0+000 to km 150+928.89, along with its easement, block valves sites, above-ground installations and the infrastructure leading to them (powerlines, water mains, sewerage, road connections).

At EIA report stage of the implementation of IGB the route was visited as part of the initial archeological study. The significant archeological sites falling within the route for which there is a risk to be affected by construction works have been registered. Decision № 1-1/2013 for approval of EIA report also stipulates the types of rescue archeological studies which have to be made in order to preserve archeological sites.

Following preparation of DSP-PP and precise definition of the gas pipeline route a certain number of archeological sites affected has been determined. The Ministry of Culture with its opinions №26-00-0429/28.04.2014 and №26-00-0429/13.01.2014 approves the draft DSP-PP and with opinion №33-HH-1396/18.12.14 it approves the Technical design and poses requirements for archeological studies which shall have to be performed for the archeological sites registered at EIA report phase which are affected by the gas pipeline easement. The Contracting authority needs methodological and scientific assistance for their preservation.

In accordance with EIA report the types of sites and archeological studies which have to be performed and are required for implementation of IGB project are as follows:

- Archeological sites with full rescue archeological excavations recommended before start of excavation works under the conditions of art. 148, par. 2 and par. 5 of CHA affected by the easement of IGB gas pipeline, described in Table №1.
- Archeological sites with archeological drills recommended- initial archeological excavations to specify the thickness of cultural layers under the conditions of art. 148, par. 5 CHA, affected by the easement of IGB gas pipeline, described in Table №2.
- Archeological supervision pursuant to art. 161, par. 2 of CHA during construction of archeological sites, described in Table №3 and archeological supervision for the whole route of IGB gas pipeline.

Table № 1 – Sites for full rescue archeological excavations

Number	Number of the site	Site type	Location	Gas pipeline kilometer
1.	№1	Mound necropolis consisting of 16 + 4 mounds.	The sixteen mounds are located on a ridge at 0.770 km, 325° NW of Tikla peak and at a distance of 0.563 km, 90° of the centre of the village of Lozengradtsi, Kirkovo municipality (N41°17'45.9" E25°24'19.7"). The four mounds are located in close proximity to the west of the ridge at 0.990km, 114° of the centre of the same village (N41°17'33.1" E25°24'34.5").	km 3 + 550 – 3 + 700
2.	№16	Mound necropolis	Located at 0.480 km, 117° of the centre of Vishegrad village, Kardzhali municipality (N41°36'26.9" E25°24'49.6").	km 46+650 – 46+700
3.	№21	Mound necropolis	Located at 1.560 km, 24° of the centre of Panchevo village, Kardzhali municipality	km 54+700 – 54+900

			(N41°39'57.1" E25°25'19.2").	
4.	№25	Mound necropolis	Located at 1.800 km, 150° of the centre of Stremtsi village, Kardzhali municipality (N41°42'56.1" E25°26'01.4").	km 63 + 050 – 63 + 150
5.	№29	Mound necropolis of 3 mounds	Located at 1.200 km, 329° of the centre of Sokolyane village, Kardzhali municipality (N41°45'40.9" E25°25'50.1").	km 38+300 – 38+400
6.	№31	A site of unspecified function (a building probably) from late antiquity.	Located at 0.630 km, 106° of the centre of Beli Plast village, Kardzhali village (N41°46'25.3" E25°26'09.9").	km 70+000 – 70 + 050
7.	№37	Burial mound	Located 1.550 km, 325° of the centre of Golemantsi village, Haskovo municipality (N41°47'55.3" E25°28'16.6").	km 75+300
8.	№76	Burial mound	Located in Gabera area at 1.800km 224,75° to the south-west of the centre of Chernogorovo village (N42°01'01.8" E25°38'10.05") and 164m above sea level.	km 107+250
9.	№77	A settlement of the late bronze, early iron age and antiquity	Located at 1.54km 282° of the centre of Voden village, Dimitrovgrad municipality (N42°00'42.7" E25°38'12.6") and at 146m above sea level.	km 106+950 – 107+100
10.	№78	A settlement of the late antiquity	Located at 1.56km 267° to the south-west of Voden village, Dimitrovgrad	km 106+550 – 106+700

			municipality (N42°00'38.1" E25°38'10.0") and 144m above sea level = the highest point 142m, the lowest point 157m.	
--	--	--	---	--

Table № 2- Archeological sites on which drills to be performed so as to specify the thickness of cultural layers

Number	Number of the site	Site type	Location	Gas pipeline kilometer
1.	№20	Antique settlement	Located at 1.100 km, 7° of the centre of Panchevo village, Kardzhali municipality (N41°39'46.4" E25°24'57.3").	km 54 + 050 – 54 + 200
2.	№27	A settlement of the late antiquity	Located in Kazaldzha kayrak area located at 1,050 km, 34° of the centre of Stremtsi village, Kardzhali municipality (N41°44'20.1" E25°25'51.6")	km 65 + 750 – 65 + 900
3.	№33	Antique settlement	Located at 1.440 km, 163° of the centre of Zornitsa village, Haskovo municipality (N41°47'40.5" E25°26'50").	km 72 + 800 – 72 + 900
4.	№41	Antique and medieval settlement	Located at 0.660 km, 130° of the centre of Mandra village, Haskovo municipality (N41°48'55.1" E25°30'39.3").	km 79+800 – 80+000
5.	№44	Prehistoric settlement	Located in the Belenska mogila area (Orlova chuka) at 1.530 km, 27° of the centre of Orlovo village, Haskovo municipality	km 84 + 400 – 84 + 500

			(N41°50'26.3" E25°33'00").	
6.	№73	Antique building	Located at 1.23km 111,7° east- south-east of the centre of Trakia village, Opan municipality (N42°11'43.233" E25°39'11.731") in a forest area.	km 128+550 – 128+750
7.	№74	Antique building	Located on the ridge of a slope facing to the north/north-east at 1.5km 120° to the south-east of the centre of Trakia village, Opan municipality (N42°11'33.097" E25°39'20.732").	km 128 + 350 – 128 + 450

Table № 3 – Site for archeological supervision

Number	Number of the site	Site type	Location	Gas pipeline kilometer
1.	№2	Burial mound	Located at 1.617 km, 345° of the centre of Kirkovo village (N41°20'42.3" E25°21'37.9")	km 11+300
2.	№3	Antique settlement	Located at 0,965 km, 305° of the centre of Domishte village, Kirkovo municipality (N41°21'38.6" E25°21'52.8").	km 13+250
3.	№4	Antique settlement	Located at 0.430 km, 335° of the centre of Malka Parvitsa village (N41°23'09.4" E25°21'57.8").	km 16+150
4.	№5	Thracian rock sacred place	Located at 1.300 km, 256° of the centre of Ostrovets village, Kirkovo municipality	km 7+00

			(N41°23'33.7" E25°22'07.1").	
5.	№6	Thracian rock sacred place	Located at a distance of 1.370 km, 265° of the centre of Ostrovets village, Kirkovo municipality (N41°23'38.5" E25°22'02.5").	km 7+00
6.	№7	Antique settlement	Located at a distance of 0.430 km, 70° of the centre of Karchovsko village, Kirkovo municipality (N41°24'46.5" E25°21'29.1").	km 16+650
7.	№8	Antique settlement	Located at a distance of 0,635 km, 31° of the centre of Karchovsko village, Kirkovo municipality (N41°24'59.4" E25°21'25.8").	km 19 + 950 – 2 + 100
8.	№9	Medieval flat boulder necropolis	Located at a distance of 0.975 km, 36° of the centre of Karchovsko village, Kirkovo municipality (N41°25'07.5" E25°21'36.1").	km 20+400
9.	№10	Antique settlement	Located at a distance of 0.500 km, 307° of the centre of Velikdenche village, Kirkovo municipality (N41°27'15.2" E25°20'48.1").	km 25 + 250 – 25 + 300
10.	№11	Mound necropolis	Located at a distance of 1.440 km, 81° of the centre of Slanchogled village, Dzhebel municipality	km 31+200

			(N41°29'41.5" E25°22'11.3").	
11.	№12	Burial mound	Located at a distance of 0.960 km, 288° of the centre of Sadovitsa village, Momchilgrad municipality (N41°30'29.7" E25°22'18.8").	km 32+600
12.	№15	A fortress of the late bronze and early iron age	Located in Harman kaya area at 0.900 km, 210° of the centre of Vishegrad village, Kardzhali municipality (N41°36'07.5" E25°24'09.9").	km 45+700
13.	№17	A settlement of the late antiquity	Located at 1.100 km, 272° of the centre of Sedlovina village, Kardzhali municipality (N41°37'56.4" E25°25'03.6").	km 51+500
14.	№18	Antique settlement	Located 0.630 km, 35° of the centre of Panchevo village, Kardzhali municipality (N41°39'26.8" E25°25'07.6").	km 53+400 – 53+500
15.	№19	Mound necropolis	Located at 0.900 km, 20° of the centre of Panchevo village, Kardzhali municipality (N41°39'37.9" E25°25'04.4").	km 53+800
16.	№22	Antique settlement	Located at 1.120 km, 102° of the centre of Zvezden village, Kardzhali (N41°40'22.1" E25°26'42.3").	km 57+900 – 58+000
17.	№23	Mound necropolis	Located at 2.230 km, 153° of the centre of Stremtsi village, Kardzhali municipality in	km 62+750

			Karachalak area (N41°42'43.1" E25°26'03.5").	
18.	№24	Antique settlement	Located on a ridge at 1.950 km, 149° of the centre of Stremtsi village, Kardzhali municipality in Karachalak tepe area (N41°42'53.1" E25°26'04.9").	km 63+000
19.	№26	Burial mound	Located at 0.950 km, 135° of the centre of Stremtsi village, Kardzhali municipality (N41°43'25.2" E25°25'49.8").	km 64+000
20.	№28	Burial mound	Located at 0.630 km, 250° of the centre of Sokolyane village, Kardzhali municipality (N41°44'59.4" E25°25'52.3").	km 67+000
21.	№29	Mound necropolis of 3 mound	Located at 1.200 km, 329° of the centre of Sokolyane village, Kardzhali municipality (N41°45'40.9" E25°25'50.1").	km 38+300 – 38+400
22.	№30	Burial mound	Located at 1.010 km, 170° of the centre of Beli Plast village, Kardzhali municipality (N41°45'56.9" E25°25'51.6").	km 68+850
23.	№32	A settlement of the late antiquity	Located at 1.650 km, 170° of the centre of Zornitsa village, Haskovo municipality (N41°47'33" E25°26'44.9")	km 72+550
24.	№33	Antique settlement	Located at 1.440 km, 163° of the centre of Zornitsa village, Haskovo municipality	km 72 + 800 – 72 + 900

			(N41°47'40.5" E25°26'50").	
25.	№34	Burial mound and flat necropolis	Located at 1.350 km, 131° of the centre of Zornitsa village, Haskovo municipality (N41°47'57.1" E25°27'15.9").	km 73+700
26.	№35	A site of unspecified function	Located at 2.000 km, 316° of the centre of Golemantsi village, Haskovo municipality (N41°48'02.8" E25°27'52.9").	km 75 + 700
27.	№36	Burial mound	Located at 1.800 km, 326° of the centre of Golemantsi village, Haskovo municipality (N41°48'02.4" E25°28'10.7").	km 75+000
28.	№38	Burial mound	Located at 1.427 km, 354° of the centre of Golemantsi village, Haskovo municipality (N41°47'59" E25°28'49.1").	km 76+100
29.	№39	Burial mound	Located at 1.580 km, 359° of the centre of Golemantsi village, Haskovo municipality (N41°48'04.3" E25°28'54.9").	km 76+300
30.	№40	Burial mound	Located at 1.700 km, 1° of the centre of Golemantsi village, Haskovo municipality (N41°48'08.3" E25°28'57.1").	km 76+500
31.	№42	Antique settlement	Located at 1.380 km, 262° of the centre of Orlovo village, Haskovo municipality	km 81+550

			(N41°49'34.7" E25°31'30.7").	
32.	№43	Burial mound	Located in Belenska mogila area (Orlovska chukka) at 1.770 km, 30° of the centre of Orlovo village, Haskovo municipality (N41°50'30.5" E25°33'04.1").	km 84+500
33.	№48	Burial mound	Located in Gabera area at 1.6km and 220° to the south-west of the centre of Chernogorovo village, Dimitrovgrad municipality (N42°01'03,7" E25°38'22,7") and 157m above sea level.	km 107+500
34.	№49	Antique settlement	Located at 1.100 km, 233° of the centre of Chernogorovo village, Dimitrovgrad municipality (N42°01'22" E25°38'29.5").	km 108+000
35.	№50	A building of the late antiquity	Located at 1.500 km, 303° of the centre of Brod village, Dimitrovgrad municipality (N42°03'15.5" E25°39'59.4").	km 112+300
36.	№51	Burial mound	Located at 1.750 km, 324° of the centre of Brod village, Dimitrovgrad municipality (N42°03'35.5" E25°40'10.3").	km 113+000
37.	№52	Burial mound	Located at 2.670km, 328° of the centre of Brod village, Dimitrovgrad municipality (N42°04'03,9" E25°39'52,5")	km 114+000

38.	№53	Antique settlement	Located at 3.260km, 330° of the centre of Brod village, Dimitrovgrad municipality (N42°04'18.6" E25°39'45.2" – start of the site 63-1: N42°04'21,1" E25°39'43,5" – end of the site).	km 114+500
39.	№54	Roman settlement	Located at 1.690 km, 265° of the village of Golyamo Asenovo, Dimitrovgrad municipality (N42°06'04" E25°39'20.3")	km 118+300
40.	№58	Antique settlement	Located at 1.150 km, 254° of the centre of Badeshte village, Stara Zagora (or N42°18'19.6" E25°39'32.1" до N42°18'27.8" E25°39'29.6").	km 142+500
41.	№66	A settlement of the late antiquity	Located at 850m 245° of Badeshte village, Stara Zagora municipality (N42°18'24.7" E25°39'57.5")	km 143+000

Note: Sites №№ 2, 9, 12, 26, 30, 32, 42, 50, 52, 54, 58, 66 are not affected by the easement of the gas pipeline in preparation of DSP and in accordance with the opinions of the Ministry of culture archeological supervision shall have to be done during construction.

Archeological studies shall have to be done only for the area of the archeological site and above ground installations affected by the easement of the gas pipeline.

Appendix 1 contains a Map of archeological sites, an excerpt from EIA report showing location of the sites. Appendix 2 contains excerpts of DSP-PP with outlines of archeological sites and the way they are affected by the gas pipeline. Appendix № 3 contains approval opinions of the Ministry of culture and the National institute for immovable cultural heritage on EIA, DSP-PP and Technical design phases for IGB gas pipeline.

In the event that as a result of archeological studies conducted under Table 2, Table 3 and archeological supervision for the whole route of IGB gas pipeline the expert committee of representatives of the Ministry of Culture requires the Contracting authority to perform a full study of some of the archeological sites within the easement, these studies shall be negotiated additionally

based on Appendix № 4 to art. 20, par. 6 of Ordinance № H-00-0001 dated 14.02.2011 on conducting field archeological studies. These services are optional and shall be assigned only if required.

Studies shall have to be performed in accordance with the requirements of: Cultural heritage Act and Ordinance № H-00-0001 dated 14.02.2011 on conducting field archeological studies.

The studies under Table 1 and Table 2 have to be completed with a decision of the committee appointed by the Minister of culture pursuant to the procedure stipulated in art. 158a of CHA on accepting the results of them.

Along the route of IGB gas pipeline easement has been established pursuant to art. 64 of the Energy Act. Compensation for damages caused to users of properties affected by archeological excavations shall be paid by the Contracting authority. In the event of the Contractor paying compensation for lost profit to users of properties affected by archeological excavations, it will be recovered following submission of documents evidencing the costs incurred.

3. Requirements to conducting archeological studies

- 3.1. The Contracting authority stipulates that the contractor nominated shall procure a permit, in accordance with the Cultural Heritage Act, and will conduct until **final completion Full rescue archeological excavations** of the registered archeological sites described in Table 1 and **drills-initial archeological studies** of the archeological sites registered, described in Table 2, before start of excavation works along the route of IGB gas pipeline.
- 3.2. The Contractor shall conduct **Archeological supervision** during construction for the archeological sites under Table 3, on the places of the sites studied under Table 1 and Table 2 and archeological supervision for the whole route of IGB gas pipeline.
- 3.3. In the event that following submission of the results of the archeological studies conducted an expert committee of the Ministry of Culture requires that additional studies be performed, the Contracting authority shall be entitled to assign them additionally. If in the course of supervision during construction archeological sites are established not included in the ones described and the need arises for additional archeological activities to be performed, they shall be assigned and conducted, their value being set via additional negotiation, based on Appendix № 3 of Ordinance № H-00-0001 dated 14.02.2011 on conducting field archeological studies.
- 3.4. The Contracting authority stipulates that **Before start of excavation works** shall be the period before the date of opening the construction site and/or building line for a particular section of IGB gas pipeline in the meaning of TPA and Ordinance № 3 of 2003 on drafting acts and protocols during construction- protocol №2 and №2a.
- 3.5. The Contracting authority stipulates that **During construction** shall be the period between the date of opening the construction site and/or building line in the meaning of TPA and Ordinance № 3 of 2003 on drafting acts and protocols during construction up to the date of completion of excavation works for a particular section of IGB gas pipeline-Protocol №12.
- 3.6. The Contracting authority stipulates that **Full rescue archeological excavations** or hereinafter referred to as **Archeological excavations** are a type of field studies in the meaning of art. 147, par.4, item 2 and par.5, item 2 of the Cultural Heritage Act and art.13 of Ordinance H-00-0001 dated 14.02.2011 on performing field archeological studies of the Ministry of culture which refers to the area of registered archeological sites in Table 1 and shall include:
 - Study of settlements within the easement of IGB gas pipeline;
 - Overall study of mounds and mound necropoles affected by the easement of IGB gas pipeline.

- 3.7. The Contracting authority stipulates that **Drill- initial archeological study** shall be a type of field archeological study related to the area of registered archeological sites in Table 2, which by surveying 10% of the territory of the site establishes the existence or lack of archeological structures and a cultural layer and enables an expert committee to the Ministry of culture to establish the need to continue or terminate archeological studies.
- 3.8. The Contracting authority stipulates that **Archeological supervision** is a type of field study in the meaning of art. 147 par.4 item 3 of the Cultural Heritage Act and art. 11 of Ordinance H-00-0001 dated 14.02.2011 on performing field archeological studies of the Ministry of culture referring to the area of registered archeological sites in Table 3, on the places of sites studied under Table 1 and Table 2 and for the whole route of IGB gas pipeline during excavations. Archeological supervision shall only refer to the affected part of the archeological site of the gas pipeline easement.
- 3.9. The Contracting authority stipulates that the obligation **until final completion** shall also include procuring the respective legally valid permits/protocol/ documents for accepting the completed Archeological studies such as a decision of the committee pursuant to art. 158a of CHA whereby the results of the study are accepted and the actions and measures proposed for them are approved and shall be considered effective for each part of the subject matter of the service.
- 3.10. The Contracting authority stipulates that implementation of the archeological studies under item 3.1 may be divided into **stages**, where each stage corresponds to one or several registered sites as per their geographical location along the route of IGB gas pipeline. The Contracting authority stipulates that setting of the stages shall be done in accordance with the construction schedule of IGB gas pipeline which will be submitted to the Contracting authority as well as with the access provided to the properties affected by archeological sites where the term for completion of each individual stage shall not exceed 3 (three) months after it has been assigned.
- 3.11. The Contracting authority stipulates that **archeological supervision** under item 3.2 shall be performed along the route of IGB gas pipeline taking fully into account the construction schedule of IGB gas pipeline which will be submitted to the Contractor.
- 3.12. The Contracting authority stipulates that Contractor nominated shall procure simultaneous implementation of archeological studies under item 3.1 for 10 archeological sites and simultaneous implementation of archeological supervision under item 3.2 for all sections of IGB gas pipeline performed in accordance with the construction schedule.
- 3.13. For final completion of **Archeological excavations and Drills – initial archeological studies** the requirements of the Contracting authority shall be the following:
- 3.13.1. The Contractor to complete all Archeological studies for a particular site under Table №1 and Table №2; and
- 3.13.2. The Contracting authority to accept implementation which is to be established with a final protocol of delivery and acceptance for each site; and
- 3.13.3. An Inspection upon completion to be performed; and
- 3.13.4. The Contractor to prepare and submit to the Contracting authority a report along with the Official papers required for performing Archeological works, including photographs and geo detection of the archeological site so as to be factually reflected in the project documentation of IGB gas pipeline, and
- 3.13.5. The Contractor to submit to the Contracting authority for each site a protocol of the expert committee under art. 158a, par. 3, with regard to art. 158a, par. 5 of the Cultural Heritage Act

approved with an order of the competent authority under art. 158a par. 6 of the Cultural Heritage Act.

- 3.14. For final completion of **Archeological supervision** the requirement of the Contracting authority shall be the following:
- 3.14.1. The Contractor to perform Archeological supervision for all registered sites in Table №3, on the places of the sites studied under Table 1 and Table 2 and for the whole route of IGB gas pipeline; and
 - 3.14.2. The Contractor to procure an Inspection upon completion
 - 3.14.3. The Contracting authority to accept performance which to be established with a final protocol of delivery and acceptance
 - 3.14.4. The Contractor to prepare and submit to the Contracting authority a report along with the required Official papers for Archeological studies performed;
- 3.15. The Contracting authority defines as **Official papers on the Archeological studies performed** all and any official papers for which it is provided to be prepared for acceptance of Archeological excavations completed pursuant to the Cultural Heritage Act and/or Ordinance H-00-0001 dated 14.02.2011 on performing field archeological studies approved by the Ministry of culture.
- 3.16. The Contracting authority defines as **Inspection upon completion** all and any checks and control including by expert Committees or by the Inspectorate to the Ministry of culture established by the effective laws in the Republic of Bulgaria and other regulations regarding completed archeological studies, regardless whether they are provided for in this contract and referred to as such. The contractor nominated shall undertake to procure and obtain a positive result of such an inspection for all archeological works performed by it.
- 3.17. The Contracting authority stipulates that the Contractor nominated shall have to use only such special technical equipment – machines and devices which have the respective registration and are stipulated by the law for performance of Archeological excavations.
- 3.18. The Contracting authority stipulates that archeological excavation shall be conducted pursuant to the scientific methodology stipulated by regulations, their purpose being to clarify the main features of archeological sites. Archeological excavations shall have to be held after the site studied is located in a coordinate system used for preparation of DSP-PP for IGB gas pipeline. In any case Archeological excavations shall have to be performed on the surface of the site downwards until a sterile layer is reached.
- 3.19. The Contractor shall have to procure and perform archeological studies in compliance with the interest of the Contracting authority. Compliance with the interests of the Contracting authority shall mean performing this volume of activities which is only required for lawful implementation of the investment initiative (IGB project) causing minimum damage on properties affected located within the easement of the gas pipeline and sites of above-ground facilities and access roads to them with the least costs and the least inconvenience, effect and interference in regular activities performed by the population, owners or other persons.
- 3.20. The Contractor shall be obliged to prepare, maintain properly and submit to the National archive of field archeological studies at NAHM to BAS / National Archeological Institute with Museum to the Bulgarian Academy of Sciences/ and to the respective museum on whose territory the Archeological excavations have been performed field documentation on the archeological studies performed within the statutory terms.

- 3.21. The contractor shall be liable for and shall procure the overall organization, control, security and supervision, workforce, special technical equipment, materials, temporary facilities as well as any other objects and activities of constant or temporary nature required to perform the Archeological studies and to remedy the defects in them within the terms agreed.
- 3.22. The Contractor shall be liable and needs to procure and use for performance of the contract a director of studies and qualified staff in accordance with the requirements of the Cultural Heritage Act and the regulations to it.
- 3.23. The Contractor shall undertake not later than 10 days of the effective date of the contract to nominate the heads of studies for each team- a person (persons) who will be in charge of Archeological works by notifying the Contracting authority of the name and contact details of the person to whom this function is entrusted. The head of studies shall have to meet the requirements of art. 150 par. 1 of the Cultural Heritage Act. The head of studies shall have the obligations pursuant to art. 16 of Ordinance № H-00-0001 dated 14.02.2011 of the Minister of Culture.
- 3.24. The Contractor undertakes and guarantees that it will procure archeological teams which will meet the following minimum requirements:
- 3.24.1. One (1) director of studies and one (1) deputy director of studies of education and qualifications conforming to the requirements of art. 150, par. 1 of the Cultural Heritage Act and archeologists who are to perform archeological excavations.
 - 3.24.2. Specialists who are to perform geo detection of archeological sites located along the route (in the section subject to study) with appropriate software and technology adapted to the specificities of the activity as well as to process digital data submitted by the Contracting authority and received during archeological excavations.
 - 3.24.3. Technical staff performing auxiliary work.
 - 3.24.4. The head of team shall be responsible for obtaining a permit for field studies in accordance with the provisions of the Cultural Heritage Act.
 - 3.24.5. Each of the teams shall need to have available the special technical equipment required which allows the application of non-destructive methods for performing the studies and this equipment shall have to be registered in accordance with the requirements of CHA.
 - 3.24.6. The number and members of teams shall have to allow studies on all archeological sites located along the route of the gas pipeline to be performed in a sequence taking into account and not interfering with the construction schedule of IGB gas pipeline submitted by the Contracting authority.
 - 3.24.7. In the event of a change of the head of studies the Contractor shall notify the Contracting authority of this circumstance within 3 days and within this term it shall nominate a new Head of studies.

4. Report and work program for organization and implementation

- 4.1. The Contractor shall draft a report and work program for organization and implementation of the Archeological excavations affected by the easement of IGB gas pipeline. The report and the work program shall have to be submitted to the Contracting authority within 30 days of the effective date of the contract and submission to the Contractor of a construction schedule for IGB gas pipeline. The report shall be accompanied with the permit for performing rescue archeological excavations pursuant to the Cultural Heritage Act procured by the Contractor.
- 4.2. The report, based on data and scientific information known to the Contractor, shall have to analyze the status of the archeological sites referred to in Table 1 and Table 2 and to

verify if there are other non-registered archeological sites along the route of IGB gas pipeline. The activities on the measures planned shall have to be updated and additional measures to be stipulated. The report shall have to come along with a Work program.

- 4.3. The work program shall have to describe the terms and procedure for performing rescue archeological excavations in accordance with the construction schedule for IGB gas pipeline for each particular archeological site. The date of assigning by the Contracting authority of a particular archeological site following provision of access to it shall be considered as initial date.
- 4.4. The work program shall be subject to approval by the Contracting authority with respect to the terms, time for implementation and coordination with the construction schedule after it has been coordinated with other participants in the construction process- the contractor of construction works mostly.

5. Drafting and submission of field documentation

For the archeological excavations performed at each site the Contractor shall draft and maintain field documentation. Copies of the field documentation shall be mandatorily submitted to the National archive of field archeological studies at NAIM to BAS and at the respective museum on whose territory Archeological excavations have been performed.

6. Communication with local authorities

The head of studies shall submit a copy of the permit for the respective type of Archeological works in the municipality, town council, regional directorate of MoI on the territory where the site is located. The head of studies shall submit in person the permit under the previous sentence to local authorities.

7. Simultaneous implementation of archeological studies

In accordance with the construction schedule of IGB gas pipeline the Contractor undertakes to procure the required heads of studies and teams for simultaneous performing of archeological studies for all archeological sites affected that fall within a particular stage of construction.

8. Internal control on implementation

The Contractor shall set up a system for current internal control on implementation of Archeological excavations.

9. Sites data

- 9.1. The Contracting authority has submitted to the Contractor all data it has available on the field peculiarities of the sites as well as studies on the environmental effect obtained by or at the expense of the Contracting authority during initial studies. The Contractor shall be liable for correct interpretation of all these data. Procurement of any additional information required for performing the work shall be part of the obligations of the Contractor.
- 9.2. The Contractor is considered to have reviewed the data submitted by the Contracting authority and based on them has studied the route of IGB gas pipeline as well as the sites, their peculiarities and other available information and to have been satisfied (to the extent possible, in view of the time and means available) before submitting the Tender in terms of :
 - ✓ The shape and nature of the sites along the route of IGB gas pipeline, incl. field peculiarities;
 - ✓ Hydrogeological and weather conditions;
 - ✓ Volume of archeological studies and special equipment required for their implementation;

- 9.3. The Contractor shall be considered to have received all the information required with respect to foreseeable risks, contingencies and other circumstances which may affect implementation.

10. Unforeseen field peculiarities

In the event of unforeseen field peculiarities which could not have been forecast in advance by the Contractor, the latter shall be obliged to notify the Contracting authority which shall assess the said peculiarities. If following the notification, the inspection and verification performed it is established that the said peculiarities could not have been forecast, the Contracting authority will agree that there is a prerequisite for extension of the deadline.

11. Temporary facilities

The Contractor shall bear all costs and fees for installing and respectively disassembly of any temporary facilities that it needs to perform Archeological studies. The Contractor shall guarantee that installing of all and any temporary facilities shall be in accordance with the law.

12. Other obligations of the Contractor

- 12.1. The Contractor shall procure the overall control and supervision, workforce, special technical equipment, materials, temporary facilities as well as any other objects and activities of constant or temporary nature required to perform the Archeological studies.
- 12.2. The Contractor shall undertake to procure advisability and safety of all activities, completion of archeological sites and all methods used in performing archeological studies regardless of the availability or not of the approval or consent of the Contracting authority or its representatives.
- 12.3. The Contractor shall be obliged to perform and shall be responsible for the overall administration, management and control on implementation of archeological studies in accordance with the requirements of the contract, the Cultural Heritage Act and the ordinances to it as well as to comply with established or common technical and technological requirements to their implementation.
- 12.4. The Contractor shall be obliged to also comply with the regulations of control bodies supervising archeological studies in accordance with laws and bylaws.
- 12.5. The contractor shall undertake to procure at its expense the involvement of all the staff and workers required providing their remuneration, business trips costs, transportation, occupational safety, etc.
- 12.6. The Contractor shall interact and be responsible for interaction with the expert committee appointed by the Minister of culture for accepting the results of the archeological studies performed and drafting and signing the protocols required for this as well as interaction with other state authorities competent in the field of cultural heritage preservation. Interaction with the latter shall be upon notification of the Contracting authority.

13. Implementation terms. Priority studies

Archeological studies shall have to be performed in a period taking into account the construction schedule of IGB gas pipeline. The maximum deadline for completion of each individual site in accordance with Table № 1 and Table № 2 is 3 (three) months following provision of access to the site and assigned by virtue of letter of assignment by the Contracting Entity.

- 13.1. The terms proposed shall include the time required to obtain permits to perform field studies pursuant to the procedure stipulated in CHA.

- 13.2. The date of receiving a notification by the Contracting authority that access has been provided and work may be started shall be considered as the date of start of field archeological studies for each particular archeological site.
- 13.3. The date of delivery of the protocol for the results from the study (in accordance with the provisions of art. 158a CHA) to the Ministry of Culture shall be considered as the end date of completion of field archeological studies under Table № 1 and Table № 2.
- 13.4. The date the Contractor submits to the Contracting authority a protocol of the expert committee under art. 158a, par. 3, with regard to art. 158a, par. 5 of the Cultural Heritage Act approved with an order of the competent authority under art. 158a par. 6 of the Cultural Heritage Act shall be regarded as date of completion for each particular site.
- 13.5. The initial and final dates for performing complete studies for the sites, if such are to be required by the expert committee to the Ministry of culture, shall be set pursuant to the procedure referred to above.
- 13.6. The starting date of Archeological supervision shall be date on which the Contracting authority notifies the Contractor that excavation works along the route of IGB gas pipeline in accordance with the implementation schedule will start.
- 13.7. The deadline for completion of the archeological supervision coincides with the deadline for performing excavation works along the route of IGB of which the Contractor shall be notified promptly after it has become known to the Contracting authority.
- 13.8. The Contractor may request extension of the deadlines only in the set forth conditions defined in the Contract as it follows:
- 13.8.1. The term for delivery of each particular site shall be extended by the days with bad weather conditions- including all days during which the minimum temperature for 24 hours is below +10°C as per data of the Central meteorological office and a report issued by the National meteorology and hydrology institute (NMHI) to BAS for all days with downpours, all days with snowfalls, soaked earth and/or floods preventing activities under the contract to be performed.

14. Special technical equipment. Use of special technical equipment

- 15.1. The Contractor shall procure at their expense all special technical equipment required to perform the Archeological excavations. The Contractor shall use on sites only special technical equipment stipulated in the respective permit for conducting Archeological works. The Contractor shall not have the right to remove from the archeological site any of the special technical equipment without the consent of The Contracting Authority.
- 15.2. All special technical equipment and materials that will be supplied to the archeological site shall have to be used with a proper, qualified and diligent approach and in accordance with established professional standards. Earth-removing machinery and mechanization may be used only if it is stipulated in the archeological excavations study.

16. Safety measures

Upon installment of the technical equipment and the operations performed on the archeological site the Contractor shall be obliged to take into account all applicable safety regulations and provide appropriate safety measures.

The Contractor shall be liable to protect the life and health of the persons admitted to the sites subject to study.

17. Security and signs

In the course of performing the Archeological excavations the Contractor shall be obliged to procure at their expense fences and/or signs, lighting, security and surveillance of the site in the security areas set in the archeological excavations permit.

18. Environmental protection

The Contractor shall be obliged to take all measures required to protect the environment both on the archeological site and around it.

19. Archeological valuables protection

The Contractor shall be obliged to take all measures required for protection of archeological valuables by protecting them against damage or destruction and to deliver them to a state or municipal museum or to perform their conservation (under the conditions stipulated in the law).

20. Maintenance of the archeological site

During Archeological excavations the Contractor shall have to maintain the archeological site clean from any unnecessary heaps which may be an obstacle and create a risk for those working there.

21. Security on the archeological site

The Contractor shall undertake not to admit to the archeological site persons who are not directly involved in the Archeological excavations except for officials authorized to make inspections or persons authorized by the Contacting authority to make inspections.

22. Main operations on the Archeological site

The Contractor shall be obliged to perform the main operations on the archeological sites- excavation and dismantling of archeological structures- in accordance with the technology for conducting rescue archeological excavations. The Contractor shall have to limit archeological excavations only within the archeological site affected by the easement of IGB gas pipeline.

23. Supplies to the Archeological site

The Contractor shall be wholly liable for procuring, transportation, receiving, unloading and safe storage of all special technical equipment and materials and the like required for completion of the archeological excavations.

24. Recovery of the appearance

The Contractor shall reverse the digging of the archaeological site in a safe condition when the archaeological excavations will not continue and no other decision of a competent authority is available..

25. 3D localization

All established immovable and movable cultural valuables shall be localized in space via Three-dimensional localization.

26. Premises and equipment

Premises and equipment which the Applicant will use for the whole period of performance of the contract shall be procured by it and at its expense. All costs for performing the service shall be included in the price of the Applicant.

27. Correspondence.

All original documents, project documentation and original materials shall be submitted with a protocol for delivery and acceptance signed by authorized representatives of the Contractor and ICGB AD.

Copies of original documents, notifications, opinions, etc. may be sent via fax or e-mail.

All the documentation related to archeological studies completed, including permits, protocols and other documents for delivery of the site and clearing the terrain for start of construction shall be delivered by the Contractor to the Contracting authority in one copy, duly packaged for each individual site.

Appendices:

1. Appendix 1 – A map of archeological sites, an excerpt of EIA report illustrating the location of sites.
2. Appendix 2 – excerpts of DSP-PP with outlines of the archeological sites and the way they are affected by the gas pipeline.
3. Appendix № 3 – opinions of the Ministry of culture and the National institute for immovable cultural heritage at EIA, DSP-PP and Technical design stages for IGB gas pipeline.